

Donor visits to the SoLAR project sites in Nepal



Image credit: IWMI-SoLAR, Nepal.

From September 05-09, 2022, representatives from the Swiss Agency for Development and Cooperation (SDC), donor for the IWMI-SoLAR-SA project, visited Nepal to monitor the solar micro-grid project and interact with beneficiary farmers, monitor the progress of work of the SoLAR Innovation Fund grantees, and network with renewable energy policymakers and officials with whom the IWMI- SoLAR Nepal team actively works.

The SDC and IWMI team met with senior officials of the Nepal Electricity Authority (NEA) and the Alternative Energy Promotion Center (AEPC) to discuss current and future interests regarding solar energy in the Government of Nepal. The NEA officials expressed a strong interest in furthering grid-connected electricity and for grid integration of solar systems to make the solar irrigation pumps financially feasible and increase the supply of complementary renewable energy to the national power grid. As government subsidies have directly supported solar irrigation pumps, they should not become obsolete due to electric pumps and should be focused on areas with no grid connectivity. The AEPC noted continual interest in promoting subsidized solar irrigation to help farmers not connected to the grid. Based on the prospects, AEPC may move towards hybrid systems powered by both solar and the grid. They are now focusing on community-scale solar projects, with 5 HP to 10 HP installations targeted at seven

or more households. The KfW is supporting the project. Twenty-four such installations have been completed, and one hundred such programs are targeted for this year.

The SDC and Nepal SoLAR team then visited the Chhipaharmahi Rural Municipality in Parsa, where the solar microgrid project is underway. The team met with the major of the rural municipality, who remained committed to promoting solar technology with farms not being connected to the grid. At the micro-grid pilot site, IWMI's local field assistant (LFA) and junior technical assistants (JTAs) from the rural municipality organized an interactive session with the beneficiary farmers. Other farmers interested in understanding the project also joined the interaction. Farmers anticipated two significant benefits from the project: access to irrigation water when required and savings from not having to buy diesel to run diesel pumps.

The structures needed for erecting solar panels have been delivered to the site for the microgrid installations. The decommissioning of the older systems has been stalled for now as farmers may require water in the coming weeks for irrigation. Progress, however, is ongoing and being overseen by the LFA, JTAs, and the newly formed farmer's group for the microgrid project.

The visiting teams also interacted with the innovation fund grantees and some of their projects' beneficiaries on September 6 and 7, 2022. In Chitwan, the IWMI-SDC delegation visited two sites of the grantee Gham power. Gham power was using the IF grantee funds to build 'Yield Improvement in a Box' that had components such as a financial payment model in partnership with local Micro Finance Institutes (MFIs) and Remote Monitoring Units (RMUs) with inbuilt sensors such as temperature, soil moisture, oxygen level, etc. to go with their solar irrigation pumps for providing agro-advisory services to the farmers.

SDC-IWMI then visited the second IF grantee, MinEnergy's site at Rajahar village in Devchuli Municipality in Nawalparasi. The site has a 10kWp solar irrigation pump system with a 10HP submersible pump for two hectares catchment area for irrigation. A 53-member user community operates the system. Twenty members, including five women, interacted with the visiting team on how they used the pumps and what challenges and opportunities they saw when doing so. The women noted that the project had reduced conflict regarding water in the area, with renewed dependence on canal irrigation. MinEnergy plans to install flowmeters so that the community can pay based on the volume of water use rather than at an hourly rate. Around 70 flowmeters are being installed at the site. Both grantees received suggestions on improving their project designs from the visiting delegation.

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